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Northeast Corridor Regional Modeling Project Urban Field Studies Data Base Description

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This report is a companion volume to EPA-450/4-82-018, "Northeast Corridor Regional Modeling Project - Description of the 1980 Urban Field Studies," which provides a complete description of the data collection process. The Northeast Corrid Regional Modeling Project (NECRMP) is a multiphase program involving EPA and State/local agencies in the development of the regional oxidant model and its application of the Northeastern United States.

This document contains a description of the Northeast Corridor Regional Modeling Project Urban Field Studies data base which has been archived on magnetic tape. The data base consists of (1) surface air quality and meteorological measurements, (2) upper air temperature and wind profiles, and (3) mixing heights obtained by acoustic radar (SODAR).

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Northeast Corridor Regional Modeling Project - Urban Field Studies Data Base Description

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Office of Air, Noise and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

September 1983

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PREFACE

This report is a companion volume to EPA-450/4-82-018, "Northeast Corridor Regional Modeling Project - Description of the 1980 Urban Field Studies," which provides a complete description of the data collection process. The Northeast Corridor Regional Modeling Project (NECRMP) is a multiphase program involving EPA and State/local agencies in the development of the regional oxidant model and its application of the Northeastern United States.

This document contains a description of the Northeast Corridor Regional Modeling Project Urban Field Studies data base which has been archived on magnetic tape. The data base consists of (1) surface air quality and meteorological measurements, (2) upper air temperature and wind profiles, and (3) mixing heights obtained by acoustic radar (SODAR).

The data base described in this report is available on magnetic tape as EPA-450/4-83-015b and can be acquired in either of two ways:

1. Government and nonprofit agencies may obtain a copy of the program by sending a blank magnetic tape and written request to:

NECRMP Data Coordinator
Air Management Technology Branch/MDAD (MD-14)
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

2. Others wishing a copy of the tape may purchase it from the National Technical Information Service, Springfield, Virginia 22161, telephone (703) 557-4650.

TABLE OF CONTENTS

	Page
List of Tables	v
List of Figures	vi
1.0 Background	1
2.0 Introduction	2
3.0 Surface Air Quality and Meteorological Measurements	4
3.1 Surface Air Quality Data	4
3.2 Surface Meteorological Data	10
4.0 Upper Air Meteorological Measurements	16
4.1 Upper Air Temperature Profiles	16
4.2 Upper Air Winds	16
4.3 Sodar Mixing Heights	16
5.0 Supplemental Surface Air Quality and Meteorological Data	20
5.1 SAROAD Air Quality Data	20
5.2 SAROAD Meteorological Data	20
Appendices	
A. NECRMP Air Quality Site Inventory	A-1
B. NECRMP Meteorological Site Inventory	B-1
C. SAROAD Air Quality Site Inventory	C-1
D. SAROAD Meteorological Site Inventory	D-1

LIST OF TABLES

Number		Page
1	NECRMP Hourly Surface Air Quality and Meteorological Data in SAROAD Hourly Data Format	5
2	SAROAD Parameter Codes	6
3	SAROAD Reporting Unit Codes	11
4	SAROAD Project Codes	12
5	SAROAD Agency Type Codes	13
6	NECRMP Upper Air Temperature Sounding Data Format	17
7	NECRMP Upper Air Wind Profile Data Format	18
8	Sodar Mixing Height Data Format	19

LIST OF FIGURES

Number		Page
1	NECRMP Ozone Monitoring Site Locations	7
2	NECRMP NMOC Monitoring Site Locations	8
3	NECRMP NO_x Monitoring Site Locations	9
4	NECRMP Temperature and Solar Radiation Site Locations . . .	14
5	NECRMP Wind Speed and Direction Site Locations	15
6	Supplemental SAROAD Ozone Site Locations	21

1.0 BACKGROUND

The Northeast Corridor Regional Modeling Project (NECRMP) is being conducted to support the development of effective ozone control strategies for the large cities in the Northeast Corridor. During Summer 1980, field programs were conducted to acquire the ambient air quality and meteorological data needed to apply the urban models in the major corridor cities. This monitoring effort included the following four tasks: (1) continuous surface air quality and meteorological measurements, (2) air quality measurements aloft, (3) upper air meteorological measurements, and (4) hydrocarbon species measurements. A complete description of the monitoring program can be found in the companion report, "Northeast Corridor Regional Modeling Project - Description of the 1980 Urban Field Studies," EPA-450/4-82-018.

2.0 INTRODUCTION

The purpose of this document is to describe the NECRMP data that has been archived on magnetic tape. The data base consists of the following five data sets:

1. surface air quality data
2. surface meteorological data
3. upper air temperature profiles
4. upper air wind profiles
5. acoustic radar mixing height measurements

Supplemental air quality and meteorological data have also been included in the data base. Although not collected as part of NECRMP, air quality and meteorological data were obtained for sites in the Northeast which routinely report to SAROAD (Storage and Retrieval of Aerometric Data). These data have been recorded in the following two data sets:

6. SAROAD surface air quality data
7. SAROAD surface meteorological data

As noted above, these seven data sets have been archived on magnetic tape. The tape has been cataloged on the UNIVAC 1100 system at the U.S. Environmental Protection Agency's National Computer Center (NCC) at the Research Triangle Park, North Carolina. Users wanting to access the tape should assign the file named 'NECRMP*DATA-BASE'. Each data set is recorded in 'COPY,G' format in the order listed above. All data sets are fixed

length and recorded in ASCII character code. The following sections contain detailed descriptions of each data set.

In addition to the above data sets, aircraft monitoring data collected in the Boston, New York and Washington, DC urban areas during Summer 1980 are available from the NECRMP Data Coordinator upon request. Also, requests for the NECRMP hydrocarbon species data should be directed to Mr. William Lonneman, Environmental Sciences Research Laboratroy (ESRL), U.S. Environmental Protection Agency, MD-84, Research Triangle Park, North Carolina 27711.

3.0 SURFACE AIR QUALITY AND METEOROLOGICAL MEASUREMENTS

During NECRMP, hourly measurements were obtained at fixed monitoring sites for selected air quality and meteorological parameters. These data were recorded in SAROAD hourly data card format as depicted in Table 1.

As noted in Table 1, each data record is an 80 column "card image" record, with 12 hourly data values per "card." The start hours for each data record are either "00" indicating midnight or "12" indicating noon, Local Standard Time. The decimal point (DP) indicator designates the number of places to the right of the decimal point in the value entries. The DP code applies to all entries on that record or "card." Normally, two records are reported for each day, unless all the measurements are missing for either half of the day. In this event, a record is typically not produced. Thus, the data user must process each record independently and not assume that two records are present for each day. In keeping with standard SAROAD coding conventions, all missing data have been nine's filled (i.e., '9999').

3.1 Surface Air Quality Data

Table 2 provides a list of the seven pollutants, and their corresponding SAROAD parameter codes, for which hourly concentration measurements were obtained during NECRMP. The site locations for the NECRMP monitoring network are shown in Figures 1 through 3. A complete inventory for the 79 NECRMP air quality monitoring sites is provided as Appendix A.

Table 1. NECRMP Hourly Surface Air Quality and Meteorological Data in SAROAD Hourly Data Format

COLUMN(s)	FORMAT	DESCRIPTION
1	I2	'1' indicates hourly data
2- 3	I2	State code
4- 7	I4	Area code
8-10	I3	Site number
11	A1	Agency code
12-13	I2	Project code
14	I1	Time interval, i.e., '1' for hourly data
15-16	I2	Year
17-18	I2	Month
19-20	I2	Day
21-22	I2	Start hour, i.e., '00' or '12'
23-27	I4	Parameter code
28-29	I2	Method code
30-31	I2	Units code
32	I1	Decimal point indicator
33-36	I4	Reading 1
37-40	I4	Reading 2
41-44	I4	Reading 3
45-48	I4	Reading 4
49-52	I4	Reading 5
53-56	I4	Reading 6
57-60	I4	Reading 7
61-64	I4	Reading 8
65-68	I4	Reading 9
69-72	I4	Reading 10
73-76	I4	Reading 11
77-80	I4	Reading 12

SAROAD SITE NUMBER

Table 2. SAROAD Parameter Codes.

Code	Parameter
44201	Ozone, O_3
42601	Nitrogen Oxide, NO
42602	Nitrogen Dioxide, NO_2
42603	Oxides of Nitrogen, NO_x
43102	Nonmethane Organic Compounds, NMOC
43201	Methane, CH_4
42101	Carbon Monoxide, CO
61101	Wind speed, WS
61102	Wind direction, WD
61104	Resultant wind direction, WD-R
62101	Ambient temperature, T
63301	Solar radiation, SR
61301	Mixing height

Figure 1. NECRMP Ozone Monitoring Site Locations.

Figure 2. NECRMP NMOC Monitoring Site Locations.

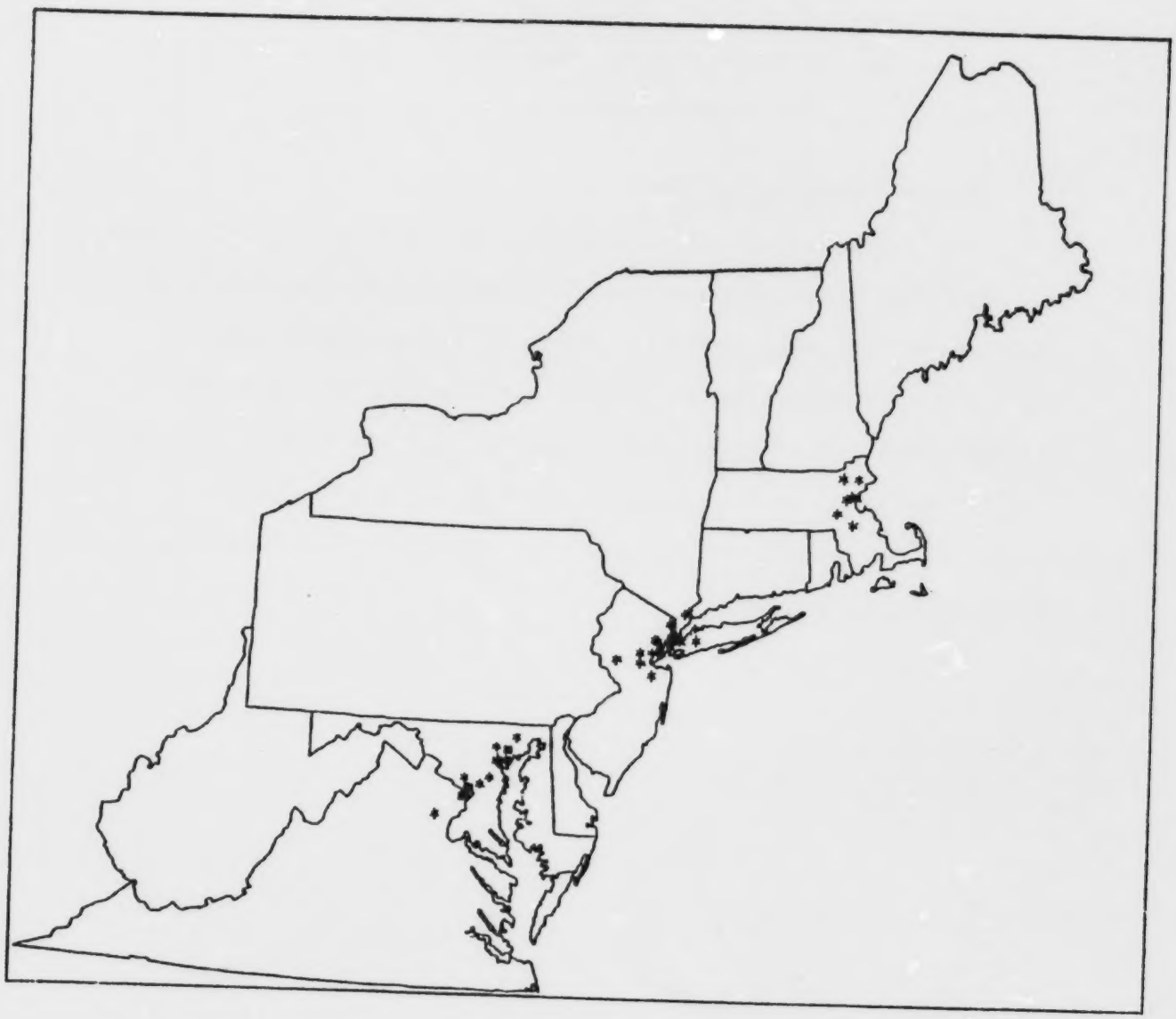

Figure 3. NECRMP NO_x Monitoring Site Locations.

All the air quality concentration values are recorded in parts per million by volume (ppmV), except for the hydrocarbon data which are recorded in parts per million carbon (ppmC). SAROAD project and agency codes are listed in Tables 4 and 5, respectively. Finally, the size of the data set is 34,771 "SAROAD CARD images" or data records.

3.2 Surface Meteorological Data

Hourly observations were obtained for five meteorological parameters during NECRMP; wind speed and direction, resultant wind direction, ambient temperature, and solar radiation. Table 2 lists the SAROAD codes for each of the meteorological parameters, the reporting units and codes are listed in Table 3. Figures 4 and 5 show the locations of each meteorological monitoring site. Appendix B provides an inventory of the 41 NECRMP surface meteorological monitoring sites, and 17,784 data records, archived in the data base.

Table 3. SAROAD Reporting Unit Codes

Code Number	Units	Parameter(s)
07	parts per million	all air quality values*
11	meters per second	wind speed
14	degrees - compass (1°-360°)	wind direction
17	degrees - centigrade	ambient temperature
25	langleys/minute	solar radiation
58	meters (AGL)	sodar mixing height

*NOTE: Units are parts per million carbon (ppmC) for nonmethane organic compounds (NMOC) and for methane (CH_4).

Table 4. SAROAD Project Codes.

Code	Project Description
01	population-oriented surveillance
02	source-oriented ambient surveillance
03	background surveillance
04	complaint investigation
05	special studies
06	episode monitoring
08	global surveillance
09	duplicate sampling
10	continuous air monitoring program

Table 5. SAROAD Agency Type Codes.

CODE	DESCRIPTION
A - E	EPA Headquarters
F	State agency
G	County agency
H	City agency
I	District agency
J	Private
K	Institution (university, college, etc.)
L	Military
M	International agency
N	Other Federal nonmilitary agencies
P	EPA Regional Office group responsible for atmospheric surveillance

Figure 4. NECRMP Temperature and Solar Radiation Site Locations.

Figure 5. NECRMP Wind Speed and Direction Site Locations.

4.0 UPPER AIR METEOROLOGICAL MEASUREMENTS

Three types of measurement programs were used to obtain upper air meteorological observations during NECRMP. These included rawinsonde soundings for temperature and wind profiles, pilot balloon observations (pibals) for wind profiles and sodars for low level mixing heights.

4.1 Upper Air Temperature Profiles

Table 6 provides the data format for the upper air temperature soundings. The locations of the six measurement stations are also displayed in the table. This data set contains a total of 12,151 data records, or sounding levels.

4.2 Upper Air Winds

During NECRMP, upper air wind profiles were obtained by rawinsonde soundings or pibals. These data have been combined into the single data set described in Table 7. The measurement station locations are noted in the table, also. A total of 71,534 sounding levels (records) have been archived in this data set.

4.3 Sodar Mixing Heights

Data obtained from the sodar were reduced into 30-minute average mixing height values. These data have been archived in SAROAD hourly data format as depicted in Table 8. Since these data are 30-minute, not hourly, averages, there are four data records for each day with correspondng start hours of '00,' '06,' '12,' and '18' Eastern Standard Time. All four records have been provided for each day, for a total of 1488 data records.

Table 6. NECRMP Upper Air Temperature Sounding Data Format.

COLUMN(s)	FORMAT	DESCRIPTION
2- 3	I2	Year
5- 6	I2	Month
8- 9	I2	Day
11-14	I4	Hour, EST
17	I1	Site type, '1'
18	I1	Site number*
21-22	I2	Level of sounding
23-24	I2	Number of sounding levels
25-32	F8.1	Pressure, millibars
33-40	F8.1	Height, meters (AGL)
41-48	F8.1	Temperature, °C
49-56	F8.1	Dew Point Temperature, °C
57-64	F8.1	Dew Point Depression, °C

* Site Locations:

1 - Baltimore, MD
2 - Boston, MA
3 - Derby, CT
4 - Newark, NJ
5 - Marlboro, NJ
6 - Washington, DC

Table 7. NECRMP Upper Air Wind Profile Data Format.

COLUMN(s)	FORMAT	DESCRIPTION
2- 3	I2	Year
5- 6	I2	Month
8- 9	I2	Day
11-14	I4	Hour, EST
17	I1	Site type, 0 = PIBAL 1 = Rawinsonde
18	I1	Site number*
21-22	I2	Level of sounding
23-24	I2	Number of sounding levels
25-32	F8.1	Height, meters (AGL)
33-40	F8.1	Height, feet (AGL)
41-48	F8.1	Windspeed, mps
49-56	F8.1	Windspeed, mph
57-64	F8.1	Wind direction, degrees

*Site Locations:

PIBAL	RAWINSONDE
1 - Bel Aire, MD	1 - Baltimore, MD
2 - Beverly, MA	2 - Boston, MA
3 - Glen Cove, NY	3 - Derby, CT
4 - Medfield, MA	4 - Newark, NJ
5 - Morristown, NJ	5 - Marlboro, NJ
6 - Manassas, VA	6 - Washington, DC

Table 8. Sodar Mixing Height Data Format.

COLUMN(s)	FORMAT	DESCRIPTION
1	I2	'1' indicates hourly data format
2- 3	I2	State code } SAROAD Codes
4- 7	I4	Area code } SAROAD Codes
8-10	I3	Site number
11-14	4x	Not used
15-16	I2	Year
17-18	I2	Month
19-20	I2	Day
21-22	I2	Start time, i.e., '00,' '06,' '12,' or '18'
23-27	I4	Parameter code, i.e., '61301'
28-29	I2	Method code, i.e., '12'
30-31	I2	Units code, i.e., '58'
32	I1	Decimal point indicator, i.e., '0'
33-36	I4	Reading 1 - 30 minute average
37-40	I4	Reading 2 - 30 minute average
41-44	I4	Reading 3 - 30 minute average
45-48	I4	Reading 4 - 30 minute average
49-52	I4	Reading 5 - 30 minute average
53-56	I4	Reading 6 - 30 minute average
57-60	I4	Reading 7 - 30 minute average
61-64	I4	Reading 8 - 30 minute average
65-68	I4	Reading 9 - 30 minute average
69-72	I4	Reading 10 - 30 minute average
73-76	I4	Reading 11 - 30 minute average
77-80	I4	Reading 12 - 30 minute average

5.0 SUPPLEMENTAL SURFACE AIR QUALITY AND METEOROLOGICAL DATA

Air quality and meteorological measurements available from monitoring sites in the Northeast were retrieved from SAROAD to supplement the NECRMP data base. These data have been recorded in SAROAD hourly data format as described in Section 2.0.

5.1 SAROAD Air Quality Data

Air quality data for 81 SAROAD sites located in the NECRMP study area were retrieved for the monitoring time period. Figure 6 shows the locations of these additional sites. A total of 26,287 data records (or "SAROAD CARD images") were retrieved from SAROAD and archived with the NECRMP data base.

Appendix C provides a complete site inventory for the supplemental SAROAD air quality data.

5.2 SAROAD Meteorological Data

Hourly surface meteorological measurements reported at 27 SAROAD monitoring sites in the Northeast for the NECRMP study period. The data formats and reporting conventions of these data are the same as those listed in Section 2.0 for the NECRMP surface meteorological data. This data set consists of a total of 15,661 fixed-length records. A complete site inventory is provided as Appendix D.

Figure 6. Supplemental SAROAD Ozone Site Locations.

APPENDIX A: NECRMP AIR QUALITY SITE INVENTORY

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
1	070175123F01	44201	O3	2780	DANBURY	FAIRFIELD CO	41 24 08	73 26 39
2	070190123F01	44201	O3	2270	DERBY	NEW HAVEN CO	41 18 59	73 5 16
3	070330004F01	42601	NO	2265	GREENWICH	FAIRFIELD CO	41 04 46	73 42 19
		42603	NOX	2271				
		44201	O3	2627				
4	070570007F01	44201	O3	2777	MIDDLETOWN	MIDDLESEX CO	41 33 06	72 37 53
5	071060001F01	44201	O3	2134	STAFFORD	TOLLAND CO	41 58 33	72 23 12
6	071110007F01	44201	O3	2406	STRATFORD POINT	FAIRFIELD CO	41 09 07	73 6 13
7	080180070A05	44201	O3	774	SUMMIT	NEW CASTLE CO	39 32 00	75 44 00
8	080240001A05	44201	O3	1625	MILLSBORO	SUSSEX CO	38 35 03	75 16 25
9	090020017A05	42601	NO	2251	W.END LIBRARY	WASHINGTON	38 54 13	77 3 6
		42602	NO2	2066				
		42603	NOX	2138				
		43102	NMHC	1422				
		43201	CH4	1500				
10	090020017I01	44201	O3	2514	W.END LIBRARY	WASHINGTON	38 54 13	77 3 6
11	090020025I01	42602	NO2	1384	TACOMA PARK	WASHINGTON	38 58 31	77 1 22
		44201	O3	2890				
12	210030014G01	44201	O3	1129	DAVIDSONVILLE	ANNE ARUNDEL CO	38 54 10	76 39 10
13	210030019A05	43102	NMHC	1527	FT. MEADE	ANNE ARUNDEL CO	39 06 05	76 43 40
		43201	CH4	1462				
14	210030019G05	42601	NO	1374	FT. MEADE	ANNE ARUNDEL CO	39 06 05	76 43 40
		42602	NO2	1763				
		44201	O3	1754				

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
15	210120004A05				E. READ ST.	BALTIMORE CITY	39 17 59	76 36 47
		42601	NO	1864				
		42602	NO2	1808				
		42603	NOX	1854				
		43102	NMHC	2213				
		43201	CH4	2290				
16	210120004H01				E. READ ST.	BALTIMORE CITY	39 17 59	76 36 47
		42601	NO	2206				
		42603	NOX	1835				
17	210120018A05				CALVERT & 22ND ST	BALTIMORE CITY	39 18 53	76 36 51
		43102	NMHC	2063				
		43201	CH4	2107				
18	210120018F01				CALVERT & 22ND ST	BALTIMORE CITY	39 18 53	76 36 51
		42601	NO	1774				
		42602	NO2	1775				
		42603	NOX	1906				
		44201	O3	2375				
19	210140010G01				GUNPONDER/PERRY H	BALTIMORE CO	39 26 00	76 27 00
		42602	NO2	924				
		44201	O3	1643				
20	210420080J05				RISING SUN	CECIL CO	39 43 07	76 6 22
		44201	O3	1564				
21	210500007G01				COCKEYSVILLE	BALTIMORE CO	39 27 40	76 37 52
		42601	NO	625				
		42602	NO2	301				
		42603	NOX	298				
		44201	O3	2472				
22	210565001F01				DAMASCUS	TALBOT CO	39 16 28	77 13 17
		44201	O3	1439				
23	210650001F01				EDGEWOOD	HARFORD CO	39 26 00	76 17 50
		44201	O3	1795				
24	210680001A05				ESSEX	BALTIMORE CO	39 18 38	76 28 29
		43102	NMHC	1973				
		43201	CH4	2083				
25	210680001G01				ESSEX	BALTIMORE CO	39 18 38	76 28 29
		42601	NO	1256				
		42602	NO2	1149				
		42603	NOX	1149				
		44201	O3	2188				

A-3

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
26	210740034G01				LIBERTYTOWN	FREDERICK CO	39 28 47	77 13 55
		44201	O3	2058				
27	210840002F01				GREENBELT	PRINCE GEORGES C	39 01 12	76 51 30
		42601	NO	1862				
		42602	NO2	1890				
		42603	NOX	1866				
		44201	O3	1986				
28	210920080J05				BEL AIR	HARFORD CO	39 34 34	76 19 46
		42601	NO	1705				
		42602	NO2	1689				
		44201	O3	1653				
29	210960005G01				COLUMBIA	HOWARD CO	39 10 10	76 53 55
		44201	O3	596				
30	211380001F01				ROCKVILLE	MONTGOMERY CO	39 05 00	77 6 26
		42601	NO	391				
		42602	NO2	369				
		42603	NOX	344				
		44201	O3	1307				
31	211560001F01				SUITLAND-SILVER H	PRINCE GEORGES C	38 51 12	76 55 55
		44201	O3	2319				
32	220240021A05				EAST BOSTON	METROPOLITAN BOS	42 22 41	71 1 42
		43102	NMHC	1933				
		43201	CH4	2068				
33	220240021F01				EAST BOSTON	METROPOLITAN BOS	42 22 41	71 1 42
		42101	CO	1202				
		42601	NO	2138				
		42603	NOX	2312				
		44201	O3	2569				
34	220480002F01				DANVERS	METROPOLITAN BOS	42 35 31	70 58 37
		42601	NO	2481				
		42603	NOX	2507				
		44201	O3	1704				
35	220535001A05				EASTON	SOUTHEASTERN MAS	42 04 02	71 5 26
		43102	NMHC	1771				
		43201	CH4	1426				
36	220535001F01				EASTON	SOUTHEASTERN MAS	42 04 02	71 5 26
		42601	NO	1935				
		42603	NOX	2544				
		44201	O3	1902				

1980 NECRHP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
37	220730001F01				GEORGETOWN	MERRIMACK VALLEY	42 43 25	70 59 16
		44201	O3	2661				
38	220795001F01				HAMILTON	METROPOLITAN BOS	42 37 50	70 48 55
		44201	O3	1536				
39	221210001A05				MEDFIELD	METROPOLITAN BOS	42 12 44	71 20 8
		43102	NMHC	1612				
		43201	CH4	2007				
40	221210001F01				MEDFIELD	METROPOLITAN BOS	42 12 44	71 20 8
		42601	NO	2556				
		42603	NOX	2543				
		44201	O3	2677				
41	221392001A05				MONTAGUE	PIONEER VALLEY A	42 34 01	72 31 42
		44201	O3	1755				
42	222100003F01				SOMERVILLE	METROPOLITAN BOS	42 24 13	71 6 30
		42601	NO	2546				
		42603	NOX	2553				
		44201	O3	2426				
43	222196001F01				SUDBURY	METROPOLITAN BOS	42 23 06	71 23 20
		44201	O3	2342				
44	222252001F01				TEWKSBURY	MERRIMACK VALLEY	42 36 29	71 13 14
		42101	CO	2084				
		42601	NO	412				
		42603	NOX	1804				
		44201	O3	1957				
45	222380005A05				WATERTOWN	METROPOLITAN BOS	42 22 29	71 10 57
		43102	NMHC	2042				
		43201	CH4	1918				
46	222380005F01				WATERTOWN	METROPOLITAN BOS	42 22 29	71 10 57
		42101	CO	2440				
		42601	NO	2274				
		44201	O3	2652				
47	300540009F01				PORTSMOUTH	ROCKINGHAM CO	43 04 41	70 45 46
		44201	O3	2849				
48	310180003A05				BAYONNE	HUDSON CO	40 40 52	74 7 11
		43102	NMHC	2343				
		43201	CH4	2298				

1980 NECRNP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
49	310180003F01				BAYONNE	HUDSON CO	40 40 52	74 7 11
		42101	CO	2136				
		42601	NO	2002				
		42602	NO2	2326				
		42603	NOX	1993				
		44201	O3	2230				
50	311120001F01				DUMONT	BERGEN CO	40 56 16	73 59 42
		42601	NO	2255				
		42602	NO2	2563				
		42603	NOX	2244				
		44201	O3	2584				
51	311160003F01				EAST ORANGE	ESSEX CO	40 45 23	74 13 00
		42601	NO	2216				
		42602	NO2	2514				
		42603	NOX	2192				
		44201	O3	2500				
52	311500001F01				FLEMINGTON	HUNTERDON CO	40 31 00	74 48 36
		42601	NO	2219				
		42602	NO2	2416				
		42603	NOX	2103				
		44201	O3	2554				
53	312580002A05				LINDEN	UNION CO	40 36 15	74 15 12
		43102	NMHC	1897				
		43201	CH4	1792				
54	312580002J05				LINDEN	UNION CO	40 36 15	74 15 12
		42601	NO	2046				
		42603	NOX	2053				
		44201	O3	2049				
55	313180004J05				MARLBORO	MONMOUTH CO	40 19 40	74 16 0
		42601	NO	1986				
		42603	NOX	1986				
		44201	O3	1924				
56	313260001F01				CHESTER	MORRIS CO	40 47 16	74 40 39
		44201	O3	2206				
57	313480004A05				NEWARK NJIT	ESSEX CO	40 44 35	74 10 52
		43102	NMHC	2083				
		43201	CH4	2090				

A-6

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
58	313480008F01				NEWARK	ESSEX CO	40 43 58	74 10 41
		42101	CO	1724				
		42601	NO	1325				
		42602	NO2	1703				
		42603	NOX	1344				
		44201	O3	1655				
59	313500002A05				NEW BRUNSWICK	MIDDLESEX CO	40 28 56	74 26 27
		43102	NMHC	2169				
		43201	CH4	2153				
60	313500002F01				NEW BRUNSWICK	MIDDLESEX CO	40 28 56	74 26 27
		42601	NO	1973				
		42602	NO2	2449				
		42603	NOX	1975				
		44201	O3	2568				
61	314300001F01				PLAINFIELD	SOMERSET CO	40 36 04	74 26 31
		42601	NO	2302				
		42602	NO2	2685				
		42603	NOX	2300				
		44201	O3	2697				
62	332900005F01				EISENHOWER PARK	NASSAU CO	40 44 43	73 35 13
		42101	CO	2715				
		42601	NO	1723				
		42602	NO2	1729				
		44201	O3	2756				
63	332900010J05				GLEN COVE	NASSAU CO	40 53 30	73 35 55
		42601	NO	1957				
		42603	NOX	1934				
		44201	O3	1922				
64	334680004F01				QUEENS COLLEGE	QUEENS CO	40 44 13	73 49 9
		42101	CO	2814				
		42601	NO	1943				
		42602	NO2	2057				
		42603	NOX	1944				
		44201	O3	2838				
65	334680007F01				SHEEPSHEAD BAY	KINGS CO	40 35 11	73 56 15
		44201	O3	2638				
66	334680010F01				MANHATTAN	NEW YORK CO	40 44 22	73 59 10
		42101	CO	2723				
		42601	NO	2183				
		42602	NO2	2269				
		42603	NOX	2186				
		44201	O3	2691				

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
67	334680067F01				STATEN ISLAND	RICHMOND CO	40 35 50	74 7 27
		42601	NO	2220				
		42602	NO2	2755				
		42603	NOX	2212				
		44201	O3	2889				
68	334680070F01				ASTORIA QUEENS	QUEENS CO	40 46 39	73 54 18
		42601	NO	1606				
		42602	NO2	2035				
		42603	NOX	1239				
		44201	O3	1501				
69	334680076F01				BRKLYN-PS 321	KINGS CO	40 40 19	73 58 40
		42601	NO	2289				
		42602	NO2	2383				
		42603	NOX	1559				
		44201	O3	1838				
70	334680084A05				QUEENS-STEINWAY	QUEENS CO	40 45 28	73 55 2
		43102	NMHC	1353				
		43201	CH4	1383				
71	334680085A05				BRKLYN-PROSPECT	NEW YORK CO	40 39 56	73 58 28
		43102	NMHC	1697				
		43201	CH4	1696				
72	336520001J05				STONY BROOK	SUFFOLK CO	40 54 45	73 7 45
		44201	O3	1827				
73	337480004F01				WHITE PLAINS	WESTCHESTER CO	41 03 08	73 45 51
		42601	NO	1527				
		42602	NO2	1619				
		44201	O3	2740				
74	398040100A05				SCRANTON	LACKAWANNA CO	41 35 30	75 45 00
		44201	O3	1719				
75	480200020A05				AURORA HILLS	ARLINGTON CO	38 51 27	77 07 30
		43102	NMHC	1282				
		43201	CH4	1403				
76	480200020G01				AURORA HILLS	ARLINGTON CO	38 51 27	77 07 30
		42602	NO2	2649				
		44201	O3	2583				
77	482520003A05				CAMP UPSHUR	PRINCE WILLIAM C	38 38 31	77 31 42
		43102	NMHC	1297				
		43201	CH4	1007				

8-61

1980 NECRMP AIR QUALITY DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
78	482520008F05				CAMP UPSHUR	PRINCE WILLIAM C	38 38 31	77 31 42
		42601	NO	2176				
		42602	NO2	1962				
		42603	NOX	2182				
		44201	03	2035				
79	500580002A05				WHITE SULFUR SPRG	GREENBRIER CO	37 46 27	80 20 0
		44201	03	1756				

APPENDIX B: NECRMP METEOROLOGICAL SITE INVENTORY

1980 NECRMP METEOROLOGICAL DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
1	070175123F01				DANBURY	FAIRFIELD CO	41 24 08	73 26 39
		61101	WS	2423				
		61102	WD	1790				
		62101	T	2299				
2	070190123F01				DERBY	NEW HAVEN CO	41 18 59	73 5 16
		61101	WS	2307				
		61102	WD	2002				
		62101	T	2537				
3	070330004F01				GREENWICH	FAIRFIELD CO	41 04 46	73 42 19
		61101	WS	2444				
		61102	WD	2085				
		62101	T	1973				
4	070570007F01				MIDDLETOWN	MIDDLESEX CO	41 33 06	72 37 53
		61101	WS	2267				
		61102	WD	2323				
		62101	T	716				
5	071060001F01				STAFFORD	TOLLAND CO	41 58 33	72 23 12
		61101	WS	2347				
		61102	WD	1766				
		62101	T	705				
6	071110007F01				STRATFORD POINT	FAIRFIELD CO	41 09 07	73 6 13
		61101	WS	2036				
		61102	WD	1606				
		62101	T	678				
7	210080014G01				DAVIDSONVILLE	ANNE ARUNDEL CO	38 54 10	76 39 10
		61101	WS	309				
		61102	WD	309				
8	210080019G05				FT. MEADE	ANNE ARUNDEL CO	39 06 05	76 43 40
		62101	T	1116				
		63301	SR	1116				
9	210140010G01				GUNPOWDER/PERRY H	BALTIMORE CO	39 26 00	76 27 00
		62101	T	1113				
		63301	SR	802				
10	210420080J05				RISING SUN	CECIL CO	39 43 07	76 6 22
		61101	WS	2001				
		61102	WD	1907				
11	210500007G01				COCKEYSVILLE	BALTIMORE CO	39 27 40	76 37 52
		61101	WS	2140				
		61102	WD	2140				

80 NECRMP METEOROLOGICAL DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
12	210565001F01				DAMASCUS	TALBOT CO	39 16 28	77 13 17
		61101	WS	1287				
		61102	WD	1287				
13	210650001F01				EDGEWOOD	HARFORD CO	39 26 00	76 17 50
		61101	WS	1868				
		61102	WD	1868				
14	210680001G01				ESSEX	BALTIMORE CO	39 18 38	76 28 29
		61101	WS	2652				
		61102	WD	2652				
15	210740034G01				LIBERTYTOWN	FREDERICK CO	39 28 47	77 13 55
		61101	WS	1370				
		61102	WD	1370				
16	210840002F01				GREENBELT	PRINCE GEORGES C	39 01 12	76 51 30
		61101	WS	2002				
		61102	WD	2002				
17	210920080J05				BEL AIR	HARFORD CO	39 34 34	76 19 46
		61101	WS	2248				
		61102	WD	2238				
		62101	T	2489				
		63301	SR	2482				
18	211380001F01				ROCKVILLE	MONTGOMERY CO	39 05 00	77 6 26
		61101	WS	440				
		61102	WD	440				
19	211560001F01				SUITLAND-SILVER H	PRINCE GEORGES C	38 51 12	76 55 55
		61101	WS	2328				
		61102	WD	2328				
20	220240021F01				EAST BOSTON	METROPOLITAN BOS	42 22 41	71 1 42
		61101	WS	2314				
		61102	WD	2315				
21	220480002F01				DANVERS	METROPOLITAN BOS	42 35 31	70 58 37
		61101	WS	2502				
		61102	WD	2464				
		62101	T	2357				
22	220535001F01				EASTON	SOUTHEASTERN MAS	42 04 02	71 5 26
		61101	WS	2293				
		61102	WD	2269				

1980 NECRMP METEOROLOGICAL DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
23	220730001F01				GEORGETOWN	MERRIMACK VALLEY	42 43 25	70 59 16
		61101	WS	2539				
		61102	WD	2478				
		62101	T	2526				
		63301	SR	2293				
24	220795001F01				HAMILTON	METROPOLITAN BOS	42 37 50	70 48 55
		61101	WS	2311				
		61102	WD	2435				
		62101	T	2532				
25	221210001F01				MEDFIELD	METROPOLITAN BOS	42 12 44	71 20 8
		61101	WS	2285				
		61102	WD	2132				
26	222100003F01				SOMERVILLE	METROPOLITAN BOS	42 24 13	71 6 30
		61101	WS	2397				
		61102	WD	2396				
27	222196001F01				SUDBURY	METROPOLITAN BOS	42 23 06	71 23 20
		61101	WS	2454				
		61102	WD	2468				
		62101	T	2543				
28	222252001F01				TEWKSBURY	MERRIMACK VALLEY	42 36 29	71 13 14
		61101	WS	981				
		61102	WD	1560				
		62101	T	2511				
29	222380005F01				WATERTOWN	METROPOLITAN BOS	42 22 29	71 10 57
		61101	WS	1609				
		61102	WD	1610				
		62101	T	1600				
		63301	SR	1955				
30	300540009F01				PORTSMOUTH	ROCKINGHAM CO	43 04 41	70 45 46
		61101	WS	2315				
		61102	WD	2294				
31	311500001F01				FLEMINGTON	HUNTERDON CO	40 31 00	74 48 36
		61101	WS	1949				
		61102	WD	2282				
		62101	T	893				
		63301	SR	168				
32	313180004J05				MARLBORO	MONMOUTH CO	40 19 40	74 16 0
		61101	WS	2081				
		61102	WD	2093				
		62101	T	2043				
		63301	SR	2079				

B.4

30 NECRMP METEOROLOGICAL DATA

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
33	313260001F01				CHESTER	MORRIS CO	40 47 16	74 40 39
		61101	WS	2444				
		61102	WD	2250				
		62101	T	2460				
34	313500002F01				NEW BRUNSWICK	MIDDLESEX CO	40 28 56	74 26 27
		61101	WS	1363				
		61102	WD	1200				
		62101	T	2363				
35	332900005F01				EISENHOWER PARK	NASSAU CO	40 44 43	73 35 13
		61101	WS	2265				
		63301	SR	2267				
		61104	WD-R	2260				
36	332900010J05				GLEN COVE	NASSAU CO	40 53 30	73 35 55
		61101	WS	2220				
		61102	WD	2201				
37	334680007F01				SHEEPSHEAD BAY	KINGS CO	40 35 11	73 56 15
		61101	WS	2307				
		61104	WD-R	2322				
38	334680067F01				STATEN ISLAND	RICHMOND CO	40 35 50	74 7 27
		61101	WS	1887				
		61104	WD-R	1888				
39	336520001J05				STONY BROOK	SUFFOLK CO	40 54 45	73 7 45
		61101	WS	1890				
		61102	WD	1892				
40	337480004F01				WHITE PLAINS	WESTCHESTER CO	41 03 08	73 45 51
		61101	WS	1893				
		61104	WD-R	1893				
41	482520008F05				CAMP UPSHUR	PRINCE WILLIAM C	38 38 31	77 31 42
		61101	WS	2323				
		61102	WD	2323				

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APPENDIX C: SAROAD AIR QUALITY SITE INVENTORY

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
1	070060123F01	44201	O3	2874	BRIDGEPORT	FAIRFIELD CO	41 11 07	73 10 33
2	070420123F01	42602	NO2	2858	HARTFORD	HARTFORD CO	41 45 39	72 40 44
		42603	NOX	2854				
		44201	O3	2906				
3	070478001F03	44201	O3	2681	MORRIS DAM	LITCHFIELD CO	41 40 21	73 8 35
4	070700123F01	44201	O3	2612	NEW HAVEN	NEW HAVEN CO	41 18 40	72 55 6
5	080020001F01	44201	O3	2151	DOVER	KENT CO	39 08 55	75 30 0
6	080180001F01	42602	NO2	1845	CLAYMONT	NEW CASTLE CO	39 48 30	75 27 0
		44201	O3	2594				
7	080180003F01	44201	O3	2342	EDGEMOOR	NEW CASTLE CO	39 46 30	75 31 0
8	080260002F01	42602	NO2	2366	WILMINGTON	NEW CASTLE CO	39 44 00	75 33 0
9	200250001F05	44201	O3	2111	CAPE ELIZABETH	CUMBERLAND CO	43 33 57	70 12 0
10	200260001F05	44201	O3	2879	CARIBOU	AROOSTOOK CO	46 52 03	68 0 53
11	200277002F05	44201	O3	2437	POWNAL	CUMBERLAND CO	43 54 30	70 13 50
12	200460001F05	44201	O3	2583	GARDINER	KENNEBEC CO	44 13 30	69 47 26
13	200907004F05	44201	O3	2193	COSTIGAN	PENOBSCOT CO	45 00 38	68 38 4
14	200907005F05	44201	O3	2258	NEWBURGH	PENOBSCOT CO	44 43 57	68 58 52
15	211360002G01	42601	NO	1887	RIVIERA BEACH	ANNE ARUNDEL CO	39 08 00	76 30 42
		42602	NO2	2432				
		42603	NOX	1882				
		44201	O3	1969				

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
16	220030002F01	44201	O3	2544	AGAWAM	PIONEER VALLEY A	42 02 08	72 33 9
17	220120003F01	44201	O3	2740	ATTLEBORO	SOUTHEASTERN MAS	41 55 48	71 15 54
18	221800005F01	44201	O3	2801	PITTSFIELD	BERKSHIRE APCD	42 27 09	73 12 4
19	221880002F01	44201	O3	1189	QUINCY	METROPOLITAN BOS	42 13 00	70 58 19
20	222640015F01	44201	O3	1743	WORCESTER	CENTRAL MASSACHU	42 16 24	71 53 18
21	300420012F01	44201	O3	2917	MANCHESTER	HILLSBOROUGH CO	42 59 34	71 27 52
22	310080005F01	44201	O3	2364	NICOTE CREEK	ATLANTIC CO	39 32 51	74 27 53
23	310720003F01	42602	NO2	2296	CAMDEN	CAMDEN CO	39 55 23	75 5 50
		42603	NOX	1899				
		44201	O3	2313				
24	310740001F01	44201	O3	2578	ANCORA	CAMDEN CO	39 40 59	74 51 45
25	310780003F01	44201	O3	2233	COURT HOUSE	CAPE MAY CO	39 06 13	74 48 54
26	312750001F01	42602	NO2	2122	MC GUIRE	BURLINGTON CO	40 02 55	74 35 2
		42603	NOX	1794				
		44201	O3	2498				
27	315400002F01	44201	O3	2689	TRENTON	MERCER CO	40 13 12	74 45 54
28	315560002F01	42602	NO2	2584	VINELAND	CUMBERLAND CO	39 29 32	75 1 15
		42603	NOX	2279				
		44201	O3	2586				
29	330280002F01	44201	O3	2686	BABYLON	SUFFOLK CO	40 44 08	73 24 22

C-3

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
30	331030003F01	44201	03	2738	ELMIRA	CHEMUNG CO	42 06 34	76 48 8
31	332020002F01	44201	03	2788	WHITE FACE MTN.	ESSEX CO	44 21 53	73 54 29
32	332480003F01	44201	03	2757	GLENS FALLS	WARREN CO	43 19 00	73 37 26
33	334330005F01	44201	03	2233	SCOTTSVILLE	MONROE CO	43 04 15	77 42 20
34	335060004F01	44201	03	2232	CAMDEN	ONEIDA CO	43 18 14	75 43 17
35	335620003F01	44201	03	2740	POUGHKEEPSIE	DUTCHESS CO	41 42 15	73 56 6
36	335680001F01	44201	03	2740	RENSSELAER	RENSSELAER CO	42 37 39	73 45 4
37	336880004F01	44201	03	2626	UTICA	ONEIDA CO	43 05 59	75 11 48
38	337240001F01	44201	03	2489	WILLIAMSON	WAYNE CO	43 14 33	77 7 51
39	361340001F03	44201	03	1800	CLINTON CO	CLINTON CO	39 25 38	83 47 14
40	361980003F01	44201	03	2887	ELYRIA	LORAIN CO	41 21 58	82 6 30
41	363400002H01	44201	03	2531	LEBANON	WARREN CO	39 25 37	84 12 9
42	363560002F01	44201	03	1456	LOGAN	HOCKING CO	39 31 38	82 22 33
43	365580001H01	44201	03	2738	PORTAGE CO	PORTAGE CO	41 10 56	81 19 49
44	365640001G01	44201	03	2326	PREBLE CO	PREBLE CO	39 50 21	84 43 29
45	366400009H01	44201	03	1472	STARK CO	STARK CO	40 52 15	81 19 51

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
46	366420012I01				STEUBENVILLE	JEFFERSON CO	40 21 36	80 37 20
		42602	NO2	2821				
		44201	03	2916				
47	390120003F01				ALLENTOWN	LEHIGH CO	40 37 07	75 26 56
		42602	NO2	1839				
		43102	NMHC	1253				
		44201	03	2533				
48	390140801F01				ALTOONA	BLAIR CO	40 31 24	78 23 20
		44201	03	44				
49	390440004F01				BADEN	BEAVER CO	40 38 08	80 13 51
		42602	NO2	2494				
		43102	NMHC	1604				
		44201	03	2651				
50	390580014F01				BEAVER FALLS	BEAVER CO	40 44 52	80 19 0
		42602	NO2	1354				
		43102	NMHC	2380				
		44201	03	2674				
51	390780017F01				BETHLEHEM	NORTHAMPTON CO	40 37 13	75 21 52
		42602	NO2	1817				
		43102	NMHC	774				
		44201	03	2558				
52	391080012F01				BRISTOL (BOROUGH)	BUCKS CO	40 06 30	74 53 00
		42602	NO2	1256				
		43102	NMHC	984				
		44201	03	2066				
53	391620002F01				CHESTER (CITY)	DELAWARE CO	39 50 30	75 22 00
		42602	NO2	1033				
		43102	NMHC	2175				
		44201	03	2367				
54	393060010F01				ERIE	ERIE CO	42 08 22	80 2 48
		42602	NO2	2033				
		43102	NMHC	1487				
		44201	03	2312				
55	394460011F01				JOHNSTOWN	CAMBRIA CO	40 14 56	78 55 4
		42602	NO2	2598				
		43102	NMHC	2310				
		44201	03	2638				

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
56	394620001F05				KUTZTOWN	BERKS CO	40 30 40	75 47 4
		42602	NO2	114				
		44201	O3	387				
57	394660007F01				LANCASTER CITY	LANCASTER CO	40 02 38	76 17 12
		42602	NO2	2300				
		43102	NMHC	292				
		44201	O3	2388				
58	396540013F01				NORRISTOWN	MONTGOMERY CO	40 06 44	75 18 38
		42602	NO2	1525				
		43102	NMHC	2342				
		44201	O3	2558				
59	397120301F03				PERRY CO	PERRY CO	40 27 28	77 10 3
		44201	O3	1775				
60	397140004H01				AMS LAB	PHILADELPHIA CO	40 00 32	75 5 54
		42601	NO	2705				
		42602	NO2	2705				
		43102	NMHC	2260				
61	397140014H01				ROXY	PHILADELPHIA CO	40 03 00	75 14 26
		44201	O3	1793				
62	397140023H01				S.E. TREATMENT PL	PHILADELPHIA CO	39 54 28	75 8 58
		44201	O3	671				
63	397140024H01				N.E. AIRPORT	PHILADELPHIA CO	40 04 35	75 0 43
		42602	NO2	2125				
		44201	O3	2695				
64	397140026H01				BROAD & SPRUCE	PHILADELPHIA CO	39 56 48	75 9 50
		42601	NO	2025				
		42602	NO2	2068				
		43102	NMHC	2094				
65	397140029H01				20TH & RACE STS.	PHILADELPHIA CO	39 57 26	75 10 23
		42601	NO	2804				
		42602	NO2	2804				
		43102	NMHC	2687				
66	397620009F01				READING	BERKS CO	40 19 15	75 55 40
		42602	NO2	1244				
		43102	NMHC	2354				
		44201	O3	2554				

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
67	399430016F01							
		42602	NO2	1868	WILKES-BARRE	LUZERNE CO	41 10 21	75 53 42
		43102	NMHC	2171				
		44201	03	2418				
68	399560008F01							
		42602	NO2	2482	YORK	YORK CO	39 57 56	76 41 57
		43102	NMHC	2184				
		44201	03	2663				
69	410140002F03							
		44201	03	2770	W.GREENWICH	KENT CO	41 36 54	71 43 11
70	410300012F01							
		44201	03	2738	PROVIDENCE	PROVIDENCE CO	41 49 32	71 24 19
71	470140003F01							
		44201	03	1282	BURLINGTON	CHITTENDEN CO	44 28 44	73 12 43
72	470265101A08							
		44201	03	2831	GREEN MOUNTAIN NA	ADDISON CO	43 56 00	73 2 0
73	480720004F05							
		44201	03	2817	CHESTERFIELD CO	CHESTERFIELD CO	37 21 26	77 35 30
74	481240003F01							
		44201	03	2914	FREDERICKSBURG	NOT ON AERO-CTYC	38 18 40	77 26 56
75	481460002F05							
		44201	03	2436	HANOVER CO	HANOVER CO	37 38 27	77 15 25
76	481500012F01							
		44201	03	2890	HENRICO CO	HENRICO CO	37 35 25	77 30 9
77	481850001G01							
		42601	NO	2776	MC LEAN	FAIRFAX CO	38 55 55	77 11 56
		42602	NO2	2764				
		44201	03	2295				
78	481920005F01							
		44201	03	2896	MARION	SMYTH CO	36 50 48	81 33 1
79	482180001F01							
		44201	03	2492	NORTHAMPTON CO	NORTHAMPTON CO	37 17 23	75 58 18
80	500280004F01							
		42601	NO	359	CHARLESTON	KANAWHA CO	38 20 31	81 37 12
		42602	NO2	2124				
		42603	NOX	724				
		44201	03	2751				

1980 SAROAD AIR QUALITY DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
81	502120007F01	44201	03	2582	WHEELING	OHIO CO	40 07 14	80 41 59

8.5

APPENDIX D: SAROAD METEOROLOGICAL SITE INVENTORY

1980 SAROAD METEOROLOGICAL DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
1	070060123F01				BRIDGEPORT	FAIRFIELD CO	41 11 07	73 10 33
		61101	WS	2296				
		61102	WD	2067				
		62101	T	2368				
2	070420123F01				HARTFORD	HARTFORD CO	41 45 39	72 40 44
		61101	WS	2379				
		61102	WD	2003				
		62101	T	2446				
3	070680123F01				NEW BRITAIN	HARTFORD CO	41 40 03	72 47 22
		61101	WS	2457				
		61102	WD	2292				
		62101	T	2458				
4	070700123F01				NEW HAVEN	NEW HAVEN CO	41 18 40	72 55 6
		61101	WS	2375				
		61102	WD	1936				
		62101	T	2375				
5	071080123F01				STAMFORD	FAIRFIELD CO	41 03 34	73 32 15
		61102	WD	2220				
		62101	T	2378				
6	071240123F01				WATERBURY	NEW HAVEN CO	41 32 59	73 2 39
		61101	WS	2342				
		61102	WD	2214				
		62101	T	2383				
7	200080006F05				AUGUSTA	KENNEBEC CO	44 18 08	69 46 2
		61101	WS	2834				
		61102	WD	2902				
8	200277002F05				POWNAL	CUMBERLAND CO	43 54 30	70 13 50
		61101	WS	2895				
		61102	WD	2882				
9	200960010F01				PORTLAND	CUMBERLAND CO	43 40 43	70 16 45
		61101	WS	2632				
		61102	WD	2785				
10	211360002G01				RIVIERA BEACH	ANNE ARUNDEL CO	39 08 00	76 30 42
		61101	WS	1862				
		61102	WD	1862				
11	366420012I01				STEUBENVILLE	JEFFERSON CO	40 21 36	80 37 20
		61101	WS	2928				
		61102	WD	2870				
12	390120003F01				ALLENTOWN	LEHIGH CO	40 37 07	75 26 56
		61101	WS	2669				
		61102	WD	2669				
		62101	T	1446				

1980 SAROAD METEOROLOGICAL DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
13	390140801F01				ALTOONA	BLAIR CO	40 31 24	78 23 20
		61101	WS	790				
		61102	WD	856				
14	390440004F01				BADEN	BEAVER CO	40 38 08	80 13 51
		61101	WS	2085				
		61102	WD	2792				
		62101	T	2727				
15	390580014F01				BEAVER FALLS	BEAVER CO	40 44 52	80 19 0
		61101	WS	2487				
		61102	WD	2366				
		62101	T	2585				
16	390780017F01				BETHLEHEM	NORTHAMPTON CO	40 37 13	75 21 52
		61101	WS	2665				
		61102	WD	2674				
		62101	T	2633				
17	391080012F01				BRISTOL (BOROUGH)	BUCKS CO	40 06 30	74 53 00
		61101	WS	2564				
		61102	WD	2564				
		62101	T	2533				
18	391620002F01				CHESTER (CITY)	DELAWARE CO	39 50 30	75 22 00
		61101	WS	2615				
		61102	WD	2614				
		62101	T	1071				
19	393060010F01				ERIE	ERIE CO	42 08 22	80 2 48
		61101	WS	2720				
		61102	WD	2720				
		62101	T	2719				
20	394460011F01				JOHNSTOWN	CAMBRIA CO	40 14 56	78 55 4
		61101	WS	2770				
		61102	WD	2770				
		62101	T	2742				
21	394620001F05				KUTZTOWN	BERKS CO	40 30 40	75 47 4
		61101	WS	1181				
		61102	WD	1821				
22	394660007F01				LANCASTER CITY	LANCASTER CO	40 02 38	76 17 12
		61101	WS	2643				
		61102	WD	2310				
		62101	T	2617				

1980 SAROAD METEOROLOGICAL DATA FOR SELECTED NE CORRIDOR SITES

NO.	SITE ID	CODE	PARAMETER	NO. OF VALUES	LOCATION	COUNTY	LATITUDE	LONGITUDE
23	396540013F01				NORRISTOWN	MONTGOMERY CO	40 06 44	75 18 38
		61101	WS	2589				
		61102	WD	2589				
		62101	T	2553				
24	397620009F01				READING	BERKS CO	40 19 15	75 55 40
		61101	WS	2650				
		61102	WD	2651				
		62101	T	2615				
25	399430016F01				WILKES-BARRE	LUZERNE CO	41 10 21	75 53 42
		61101	WS	2621				
		61102	WD	2608				
		62101	T	2558				
26	399560008F01				YORK	YORK CO	39 57 56	76 41 57
		61101	WS	2700				
		61102	WD	2685				
		62101	T	2687				
27	410140002F03				W.GREENWICH	KENT CO	41 36 54	71 43 11
		61101	WS	2793				
		61102	WD	2804				

A-4

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